

Serial No. 09/821,009

Response to non-final office action

Examiner: Cameron Saadat
Group Art Unit: 3713**AMENDMENTS TO THE CLAIMS:**

Claims 1-69. (canceled)

Claim 70 (currently amended): A computer-based teaching and evaluation method for assessing a learner's preferred learning style and presenting to the learner instructional information using an instructional strategy that favors the learner's preferred learning style, the instructional information organized into course material, at least a part of the course material prepared in a plurality of instructional strategy formats, said method comprising:

- identifying a set of instructional information prepared in a plurality of instructional strategy formats;

- identifying initial weight values to the plurality of instructional strategies corresponding to the instructional strategy formats, the initial weight values optionally determined from values set in preparation of the course material;

- identifying a bandwidth setting indicating how much bandwidth is available for the presentation of instructional information;

- presenting through a computer a set of test information, the test information optionally different from the identified instructional information;

- qualitatively assessing the student's mastery of concepts taught using instructional strategies used in the set of instructional information, the assessment performed automatically through the student's performance of a concept mastery test;

- adjusting the weight values of the plurality of instructional strategies using the qualitative assessment to favor instructional strategies showing greater mastery of instructional material by the student;

- in subsequent information presentations, choosing instructional strategies in a random pattern, the choice of strategies favoring the use of those instructional strategies having a weight indicating a greater likelihood of greater success of the student's instruction, the choice of strategies further favoring instructional strategies that require an available bandwidth below the

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bandwidth setting.

Claim 71 (previously added): A method according to claim 70, further comprising assigning a rating regarding the relative strength for a particular student of each presented instructional strategy associated with a selected concept.

Claim 72 (previously added): A method according to claim 71, further comprising building a profile of a learning style of a student based on the ratings of the instructional strategies.

Claim 73 (previously added): A method according to claim 70, further comprising tracking the frequency of use of each instructional strategy for a particular student.

Claim 74 (previously added): A method according to claim 70, further comprising preparing at least one assignment for a student to perform as part of the information presentation step.

Claim 75 (previously added): A method according to claim 70, wherein said presenting by way of a web-browser executing on a client computer and further wherein said presenting is by communication over a network.

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Claim 76. (new) A computer-based teaching and evaluation method for assessing a learner's preferred learning style and presenting to the learner instructional information using an instructional strategy that favors the learner's preferred learning style, the instructional information organized into course material, at least a part of the course material prepared in a plurality of instructional strategy formats, said method comprising:

identifying a set of instructional information prepared in a plurality of instructional strategy formats;

identifying initial weight values to the plurality of instructional strategies corresponding to the instructional strategy formats, the initial weight values optionally determined from values set in preparation of the course material;

presenting to a student through a computer a set of evaluation instruments, each evaluation instrument requesting a response from the student useful to measure the student's competency relating to a topic taught using one of the plurality of instructional strategies;

qualitatively assessing the student's mastery of concepts taught using instructional strategies used in the set of instructional information, the assessment performed using the student's responses to the evaluation instruments and further by relating the responses to the instructional strategies used to teach the tested concepts;

adjusting the weight values of the plurality of instructional strategies using the qualitative assessment to favor instructional strategies showing greater mastery of instructional material by the student;

in subsequent information presentations, increasing the use of those instructional strategies having a weight indicating a greater likelihood of greater success of the student's instruction, wherein the instructional strategies are chosen in a random pattern, the choice of strategies favoring the use of those instructional strategies having a weight indicating a greater likelihood of greater success of the student's instruction.

Claim 77 (new): A method according to claim 76, further comprising assigning a rating regarding the relative strength for a particular student of each presented instructional strategy associated with a selected concept.

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Claim 78 (new): A method according to claim 76, further comprising building a profile of a learning style of a student based on the ratings of the instructional strategies.

Claim 79 (new): A method according to claim 76, further comprising tracking the frequency of use of each instructional strategy for a particular student.

Claim 80 (new): A method according to claim 76, further comprising preparing at least one assignment for a student to perform as part of the information presentation step.

Claim 81 (new): A method according to claim 76, wherein said presenting by way of a web-browser executing on a client computer and further wherein said presenting is by communication over a network.

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Claim 82 (new): A computer-based teaching and evaluation system comprising:

a presentation engine to present instructional information to a student using a plurality of instructional strategies;

a data store, coupled to the presentation engine, to store a set of instructional information prepared in a plurality of instructional strategy formats;

a set of weights assigned to the plurality of instructional strategies of the instructional information stored to said data store;

an assessment engine coupled to the presentation engine, said assessment engine functional to presenting to a student through said presentation engine a set of evaluation instruments, each evaluation instrument requesting a response from the student useful to measure the student's competency relating to a topic taught using one of the plurality of instructional strategies stored to said data store; said assessment engine further functional to qualitatively assess the student's mastery of concepts taught using instructional strategies, the assessment performed using the student's responses to the evaluation instruments and further by relating the responses to the instructional strategies used to teach the tested concepts, said assessment engine further functional to adjust said weights, using the qualitative assessment, to favor instructional strategies showing greater mastery of instructional material by the student;

a learning management engine, coupled to the assessment engine and the presentation engine, said learning management engine setting initial weight values to a plurality of instructional strategies corresponding to the instructional strategies stored to said data store, the initial weight values optionally determined from values set in preparation of the course material, said learning management engine referring to the weight values to increase the use of those instructional strategies having a weight indicating a greater likelihood of greater success of the student's instruction, further wherein said learning management engine chooses instructional strategies in a random pattern, the choice of strategies favoring the use of those instructional strategies having a weight indicating a greater likelihood of greater success of the student's instruction.

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Claim 83 (new): A system according to claim 82, wherein either of said assessment engine or said learning management engine is functional to assign ratings regarding the relative strength for a particular student of each presented instructional strategy associated with a selected concept.

Claim 84 (new): A system according to claim 82, wherein either of said assessment engine or said learning management engine is functional to build profiles of learning styles for students based on the ratings of the instructional strategies.

Claim 85 (new): A system according to claim 82, wherein either of said assessment engine or said learning management engine is functional to track the frequency of use of each instructional strategy for particular students.

Claim 86 (new): A system according to claim 82, wherein said presentation engine is operable to present instructional information to students by way of a web-browser executing on a client computer by way of communication over a network.